UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

23373

7590

09/25/2009

SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 EXAMINER

CANTELMO, GREGG

ART UNIT PAPER NUMBER

1795

DATE MAILED: 09/25/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563.908	02/10/2006	Eiji Akiyama	O92407	5623

TITLE OF INVENTION: FUEL CELL SYSTEM, FUEL CELL OPERATION METHOD, AND GAS TREATMENT DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in

appropriate. All further indicated unless correcte maintenance fee notifica	correspondence includir ed below or directed oth tions.	g the Patent, advance or serwise in Block 1, by (a	rders and notification of a) specifying a new con	f maintenance fees respondence address	will be ; and/o	mailed to the current r (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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SUITE 800	VANIA AVENUE	N.W.	I S a tu	hereby certify that t tates Postal Service ddressed to the Ma ansmitted to the USI	his Fee( with sul il Stop PTO (57	(s) Transmittal is being fficient postage for first ISSUE FEE address (1) 273-2885, on the d	g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
WASHINGTON	I, DC 20037						(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR	ATTC	PRNEY DOCKET NO.	CONFIRMATION NO.
10/563,908	02/10/2006		Eiji Akiyama			Q92407	5623
		I, FUEL CELL OPERAT		_			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU		JE FEE	TOTAL FEE(S) DUE	
nonprovisional	NO	\$1510	\$300	\$0	\$0 \$1810		12/28/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
CANTELM		1795	429-013000				
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ol>			or agents OR, altern  (2) the name of a sill registered attorney of 2 registered patent a	the names of up to 3 registered patent attorneys agents OR, alternatively, the name of a single firm (having as a member a istered attorney or agent) and the names of up to egistered patent attorneys or agents. If no name is ed, no name will be printed.			
PLEASE NOTE: Unl	less an assignee is ident h in 37 CFR 3.11. Comp	A TO BE PRINTED ON T ified below, no assignee oletion of this form is NO	data will appear on the T a substitute for filing (B) RESIDENCE: (CI	patent. If an assig an assignment. I'Y and STATE OR	COUN	TRY)	ocument has been filed for
Please check the appropr	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🗖 C	orporat	ion or other private gro	oup entity Government
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	<b>tus</b> (from status indicated is SMALL ENTITY statu		☐ b. Applicant is no l	angar alaiming SMA	II DN	TITY status Sec 27 C	EB 1 27(a)(2)
NOTE: The Issue Fee an	d Publication Fee (if req		d from anyone other tha				ne assignee or other party in
Authorized Signature				Date			
Typed or printed name				-			
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria 223	tiality is governed by 35 d application form to the ions for reducing this but rirginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the NOT SEND FEES OR (	on is required to obtain of 1.14. This collection is depending upon the ine Chief Information Of COMPLETED FORMS	or retain a benefit by estimated to take 12 dividual case. Any c icer, U.S. Patent and TO THIS ADDRES	the pub minute ommen l Trader S. SEN	lic which is to file (and s to complete, including ts on the amount of timerk Office, U.S. Depo D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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10/563,908	02/10/2006	Eiji Akiyama	Q92407	5623
23373 75	23373 7590 09/25/2009			INER
SUGHRUE MIC	N, PLLC	CANTELMO, GREGG		
	ANIA AVENUE, N.W	ART UNIT	PAPER NUMBER	
SUITE 800 WASHINGTON, I	DC 20037		1795 DATE MAILED: 09/25/200	9

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 777 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 777 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/563,908	AKIYAMA ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Gregg Cantelmo	1795	
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is	in this application. If not included nunication will be mailed in due course	
2. ☑ The allowed claim(s) is/are <u>1-13 and 15-17</u> .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ul>	be been received. be been received in Applicat	ion No	m the
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached E>	(AMINER'S AMENDMENT or NOTICE	
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.		
(a) including changes required by the Notice of Draftspers		ew ( PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	,		
<ul> <li>(b) ☐ including changes required by the attached Examiner's         Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1</li> </ul>	.84(c)) should be written on	the drawings in the front (not the back) o	of
each sheet. Replacement sheet(s) should be labeled as such in t	_		
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>			9
<ul> <li>Attachment(s)</li> <li>1. ☐ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 8/26/09</li> <li>4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	6. ☐ Interview S Paper No 7. ☐ Examiner'	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowance 	ı

#### **DETAILED ACTION**

## Allowable Subject Matter

Claims 1-13 and 15-17 are allowed.

Reasons for allowance for claims 1-8 and claim 13, which incorporates previously indicated allowable subject matter, can be found in the previous office action.

The following is an examiner's statement of reasons for allowance: regarding claims 9-11, the amendment to claim 9 now recites "wherein a gas-liquid separation membrane is present between said container and said catalyst". By reciting positive limitations of the fuel cell in the preamble ("said container" recited in the second to last line of the claim), patentable weight is not accorded to the fuel cell recited in lines 1-4 of the preamble. None of the prior art of record is held to reasonably teach, suggest or render obvious the gas treatment apparatus and fuel cell described in claim 9 wherein a gas-liquid separation membrane is present between the fuel storing container in contact with the fuel electrode of the fuel cell and the catalyst of the gas treatment apparatus.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is 571-272-1283. The examiner can normally be reached on Monday to Thursday, 8:30-6:30.

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Art Unit: 1795

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregg Cantelmo/ Primary Examiner, Art Unit 1795